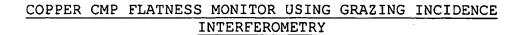
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This application is a continuation in part of

United States Patent Application 08/930,378, entitled

"Apparatus and Method for measuring Two opposite
surfaces of a Body" filed on September 24, 1997, which
is the U.S. National Phase Application of WO 97/27452,
filed on August 1, 1996, the entirety of which is
hereby incorporated by reference.

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates generally to the

15 art of optical inspection of specimens, such as
semiconductor wafers and hard disk surfaces, and more
specifically to a system for determining surface
topographies in the nanometer range using optical
techniques.

20 Description of the Related Art

Optical inspection techniques for specimens, such as semiconductor wafers, have assessed the relative flatness of specimen surfaces using various techniques. Surface flatness is a critical parameter used to determine the overall quality of a semiconductor wafer, and wafers having large irregular areas or small areas with radical height differences are undesirable.

For CMP (Chemical Mechanical Planarization)

30 processed wafers, the starting material is a bare silicon wafer. Such a bare silicon wafer must be flat

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